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# THE AMERICAN BEE JOURNAL

OLDEST BEE PAPER IN AMERICA

GEORGE W. YORK,  
Editor.

DEVOTED EXCLUSIVELY  
TO BEE-CULTURE.

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Sample Free.

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NO. 14.



**Dr. Miller**, the President of the North American, has something to say about the place where the convention meets next week. It is found on the next page. Better write in advance for rooms, as the Louisiana Hotel is crowded all the time. Still, they expect to care for all the bee-convention people when they get there. Yet it might save you annoyance to let them know ahead just what kind of a room you want, and what day you will arrive at the Hotel. See Hotel advertisement on page 420.

**Bro. Newman**, formerly editor of the AMERICAN BEE JOURNAL, we regret to learn is again unwell. He has had a hard struggle the past four or five years, having had several attacks of "la grippe," which each succeeding time naturally left him in a worse condition than before. We believe that nothing would help him so much as a trip to California—the land of luscious fruits and health-giving climate. There is scarcely anything that aids as much toward speedy recovery of health as a complete change of climate and surroundings. It beats swallowing several drug-stores, besides being less expensive. Bro. Newman hopes, and expects, to be able to attend the North American convention next week, to again greet his many bee-keeping friends.

**The North American Convention** next Wednesday, Thursday and Friday, promises to be a grand affair. In addition to the names published last week, we have received notice that the following will also be present:

Prof. A. J. Cook, of Michigan.  
N. B. Gaylord, of Minnesota.  
J. L. Welter, of Pennsylvania.  
J. F. Michael, of Ohio.  
Dr. Jesse Oren, Mrs. M. A. P. Oren, Miss Viola Oren, and Mrs. I. Hinskey, of Iowa.  
R. C. Aikin, of Colorado.  
Allen Pringle, Superintendent Ontario, Canada, Apiarian Exhibit at World's Fair.  
W. C. Frazier, of Iowa.  
Mrs. Oliver Cole and Fred H. Fargo, of New York.  
Mrs. S. E. Sherman and Miss Pauline H. Gresser, of Texas.

**Bro. E. Whitcomb** was again elected President of the Nebraska State Bee-Keepers' Association at its meeting in Lincoln on Sept. 14th. It shows that Nebraska folks know a good article when they see it, and mean to hold on to it when once they get it in their hands. This is another case of "right man in the right place."

**The P. L. Viallon Mfg. Co.** has sold out to Mr. L. V. Esneault, of Donaldsonville, La., and the business will be continued at that place hereafter. The new proprietor hopes to receive the favors of the former firm's patrons, and will do all in his power to give entire satisfaction.

**The Programme** and final announcement for the Convention next week, will be found on page 441. It came too late to appear in the front part of this number of the BEE JOURNAL.

**The Hotel and the Hall,** where the North American Convention is to be held next Wednesday, Thursday and Friday, seems to suit President Miller exactly. He's been stopping there with Mrs. Miller and Miss Emma Wilson, and here is what he has to say about our selection of a place for holding the big bee-convention:

FRIEND YORK:—I've been stopping at the Louisiana Hotel, taking a look with my wife and sister at the Big Show, and I don't care to say anything about it to you, but I want to say to the readers of the "Old Reliable," that I, for one, am much pleased with the selection of the place for our convention on Oct. 11th, 12th and 13th.

In the first place, there is a decided advantage in having the Hall for the convention and the Hotel where the bee-keepers stop, both in the same building. It gives us a better chance for a sociable time, and saves the trouble of going a distance from Hotel to Hall.

In the second place, both Hotel and Hall are good. The Hall may be too large, but we'll hope not. As to the Hotel, it's certainly large enough, for 600 people slept there last night, and everything about it is new and clean. Nothing extravagant or stylish, everything temporary, but when you come to solid comfort it beats the average hotel at double the price. My bedstead had legs of pine scantling, but when I got on it, and shut my eyes, I could imagine it a \$100 affair, for it had a good mattress on a woven-wire springs.

One of the good things about it is, that you can have a roomy, well-ventilated room for a low price—from 50 cents to \$1.00 per day, and if you want to go to the Fair, only a little way to go.

All in all, we owe a vote of thanks to our Treasurer, for the selection.

It will be a wise thing to write in advance to secure rooms. The Illinois Central railroad stops within a block. C. C. MILLER.

World's Fair Grounds, Sept. 26, 1893.

We are indeed gratified to know that everything is so satisfactory. We feared to undertake the job of selecting a place for the meeting, so we are now glad to find out that the prospects are that all will be well. You'll miss a "regular camp-meeting" if you are not there, reader.

**World's Fair Notes.**—Visiting the Fair last Saturday (Sept. 23rd), we found all the apiarian exhibits finally completed. It is indeed a grand sight, not only as a collective exhibit, but also individually. It shows what America can do in bee-culture when given the opportunity to present before the gathered nations of the world her industry devoted to the garnering of sweet-

ness that otherwise would be "wasted on the desert air," or, for that matter, be lost for ever.

We do hope that as many of our readers as possible will be permitted to see the fine exhibits of bees, honey, wax and apiarian supplies to be found in the southeast portion of the gallery of the Agricultural Building at the Columbian Exposition.

By way of further comments at this time, we may say that—

Judge Secor was busy with his work of judging the apiarian exhibits. He expects to complete his duties about the middle of next month. Mrs. Secor is at the Fair now, and also their married son, who is a veritable "chip off the old block." We had the pleasure of meeting him, as well as Mrs. Judge Secor.

Bro. Cutting, in addition to that of Michigan, was looking after several other State exhibits whose representatives had gone home for awhile. He is an easy man to find, because always at his post of duty. His face, like some others in the apiarian department of the Fair, is becoming very familiar. We're always glad to see them all.

Bros. Stone, Hambaugh and Hershiser were respectfully looking after the exhibits of Illinois and New York. The Illinois exhibit is in four cases, one being devoted almost wholly to beeswax, both crude and in artistic designs; one case contains only extracted honey; and the other two cases are solidly filled with comb honey in one-pound sections. We will have more to say of the Illinois, as well as the other exhibits, ere long.

Dr. Mason and son, Ellis, had returned to Ohio. The jovial Doctor will, of course, be on hand for the bee-convention that assembles on Oct. 11th. If you want to see a man enjoy a bee-keepers' meeting, just come and keep your eye on Dr. Mason. He's one of the right kind—believes in soberness all the time, and all over, except in the face, and that's just full of sunshine.

Bro. W. O. Victor, President of the South Texas Bee-Keepers' Association, was also there. He has been trying to work up a greater interest in bee-keeping in his part of the biggest State in the Union. He said that about one-third of the distance he traveled to get to the World's Fair, was in the State of Texas. Pretty large State, that.

Bro. Lester L. Price, of Nebraska, whose

hive is illustrated and described on this page, has been almost constantly present during the Fair this summer. He has explained the workings of the Ferguson hive to over 3,000 visitors who were interested in bee-keeping. Bro. Price is a regular Western hustler, with the accompanying "get there" qualities.

Bros. Hambaugh and Stone have put in a mirrored ceiling over their extracted honey exhibit, which is a unique attraction. By looking directly above the huge pile of honey in jars and glass pails, one can see it all in an inverted position. It really looks like two exhibits instead of one, though of course the upper exhibit is "all in your eye," and not in the case. One visitor became alarmed when gazing at the apparently hanging and inverted exhibit of so much extracted honey, and asked if there wasn't danger of its falling, and causing a big smash up! It takes Bro. Hambaugh to tell about the fun he's having with that looking-glass arrangement.

**The Ferguson Bee-Hive**, which we illustrate on this page, shows another advance step in progressive bee-culture. Although not so extensively known to the apiarian world, yet it has been in use for



*The Ferguson Hive and Super.*

eight years by bee-keepers in the West, though not until recently placed on sale, and has given unbounded satisfaction wherever it has had a fair trial.

The body or brood-nest of the Ferguson

hive is the well-known and popular Langstroth or 8-frame dovetail hive.

The principal and radical improvements, as claimed, are in the section-case, which may be used on any other hive. It holds the usual size one-pound sections for comb honey, which have no insets or scallops at the edge, and these when in the super are close fitting to each other. Perforated separators, which come even with the outside of the sections on all sides, and are dropped loosely between the sections, cause every comb to be as straight and smooth as a board. The sections and separators are clamped sidewise by the side-opening door of the super, and endwise by a wedge.

The bees have access only to the inside of the sections, the outside and the edges thereby retaining their original whiteness. The bees are admitted to each section through a round hole in the center of its bottom. The sections rest on a honey-board with corresponding openings beneath; and in grooves in the honey-board, which the bees cannot reach, are slides, with openings that register with those in both sections and the honey-board. These slides are operated from the outside, away from the bees, and this places every section within the control of the bee-keeper. The bees are first admitted to the end sections, and as soon as a fair start is made in them, the central sections are opened to the bees, and, as a result, the entire super is finished about the same time.

To remove a single section at any time, simply close one of the slides, open the door, and the desired section may be taken out without disturbing the bees in the least.

Owing to the construction of the Ferguson sections and perforated-wood separators, but very little use of the smoker is required to cause the bees in the sections to go into the brood-chamber below. This done, all the slides can be closed, thus preventing their return to the super while any or all of the sections can be removed at will without disturbance to the colony.

Every section, filled in the most perfect shape, can be picked up as from a table, and without any scraping to free them from propolis; and placed into shipping-cases, or in the hands of the dealer, these sections possess special advantages. If the old style of sections, while being handled in the shipping-case, should slip past each other, the projecting part of the section will

crowd into the insets cut in the edge, and frequently mar the face of the honey, causing leakage, and frequently spoil the entire case of honey. With the Ferguson section this cannot take place.

This section super was invented and patented by a Mr. Ferguson, but finally all rights were purchased by Mr. Lester L. Price, an enterprising apiarist of the same State, who is now introducing it to bee-keepers everywhere. He has been much gratified at the success with which he has met in sales, and particularly with the generous endorsement given to his hive and super by practical bee-men.

It was endorsed, after careful investigation, by the Salt Lake County Bee-Keepers' Association, at its meeting in Salt Lake City, Utah, on May 20, 1893. One bee-keeper in Iowa, who has used this hive two years, says that in it he was able to produce more honey, which sold for  $2\frac{1}{2}$  cents more per pound, than the honey he secured in other hives in previous years, and without the necessity of scraping the sections.

Another bee-keeper, who has 30 colonies of bees, bought 30 of the Ferguson supers, threw his old ones away, and is well pleased with the new. He says they are the most complete and labor-saving to the bees that he had ever used.

Mr. Price, who owns the hive, is a wide-awake, progressive young man, and is devoting his entire time and efforts to placing this hive before the apiarian world. He has had it on exhibition at the World's Fair, and thousands of bee-keepers who have examined it there, have been pleased with it, and are confident that it must prove a valuable acquisition to modern practical apiculture.

While we do not think it wise to commend every new thing that comes forward, we do believe in encouraging those inventions which are likely to prove of greatest value to bee-keepers in general. At least the most worthy should be given a fair trial before pronouncing condemnation. With these thoughts in mind, we have given the foregoing description of the Ferguson hive and section-case, and trust that it may prove to be all its friends may fondly anticipate.

**Have You Read** the wonderful book  
Premium offers on page 421?

### Wintering Bees Under Snow.

Quite often we are asked whether it is safe, or as well, to winter bees entirely under the snow, or if it is not better to keep the snow away from the hives in winter. Bro. Doolittle, in *Gleanings*, says that if the hives are covered two-thirds the way up the brood-chamber, it is a great advantage, but if the hives are covered two-thirds the way up the cap or cover, or completely over, it is a positive damage to the bees, and worse than no snow at all.

The difficulty seems to be that, as soon as the hives are covered with snow, the warmth of the ground, combined with the warmth of the bees, makes it so warm that the bees become uneasy, go to breeding, consume large quantities of honey, thus distending their bodies and using up their vitality, causing them to die of old age during February, March and April, while the young bees have not the usual strength and vitality of bees hatched in September and October to withstand the rigors of winter, so spring dwindling and death are the result.

### Have You Read page 421 yet?

**Bees in a Sunday-School.**—A few Sabbaths ago, Mr. R. M. Whitfield, the apicultural editor of the *Southern Live Stock Journal*, of Meridian, Miss., took a colony of bees in an observatory hive to Sunday-school, and gave the pupils a short lecture on the natural history of the bee, especially upon the great respect and reverence the worker-bees have for their queen-mother—a deference far superior to that shown by children of the human family. This and a few other lessons drawn from the habits of the bee seemed to interest the children much, especially since it was out of the usual line of Sunday-school lectures. So religion and bee-keeping do mix all right.

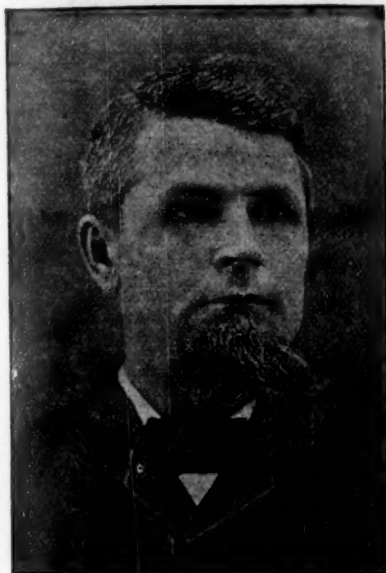
**Golden-Rod as a Medicine.**—The medicinal qualities of the golden-rod, we take it, are not generally known. We recently read of its prolonging the life of a lady six years, who suffered from asthma. By inhaling the smoke produced from it when dried, she received instant relief. The golden-rod will hereafter be prized both for its beauty and its value as a medicine.





## No. 50.—AUGUSTIN E. MANUM.

The subject of our sketch this week is another of the few "big bee-men" of the East. He is more widely known,



A. E. MANUM.

perhaps, to the readers of *Gleanings* than to those who read this journal, though no bee-keeper of Mr. Manum's experience and success could well help being known almost throughout the whole world.

The following interesting biographical account of Mr. M. was written by Mr. J. H. Larrabee, for *Gleanings*, in 1889. It shows that as a comb-honey producer Mr. Manum is in the front rank of bee-keepers. Here is the sketch entire, which, though short, contains much

"between the lines," that will give an abundance of food for meditation for some time:

Augustin E. Manum, was born in Waltsfield, Vt., on March 18, 1839. When the war broke out he enlisted in Company G, 14th Vermont regiment, as a nine-months' man. He served at the battle of Gettysburg, where his comrades in line on either side were killed; his own gun was shattered, and he was hit four times.

In March, 1870, a friend desired to lend him "Quinby's Mysteries of Bee-Keeping." Reading the book, his enthusiasm upon the subject was kindled, and he immediately purchased four colonies of bees, and began the study of apiculture. Having a natural aptitude for the business, and a love for the bees, he was successful from the first. His apiary so rapidly increased, that, at the end of four years, when he had 165 colonies, he sold out his harness business and began the pursuit as a specialist.

Since 1884, Mr. Manum has devoted all his energies to the production of comb honey, increasing his plant until his bees now number over 700 colonies in eight apiaries. He always winters his bees out-of-doors, packed in the "Bristol" chaff hive. For the eight years previous to 1887, his average loss in wintering for the entire time was only  $3\frac{1}{4}$  per cent. He uses exclusively a frame about  $12\frac{1}{2} \times 10$  inches, outside measure, which he considers the best for practical purposes in his apiaries. His hive, the "Bristol," is almost entirely his own invention, being specially adapted to the perfect working of the system upon which his bees are managed. In 1885 his production was 44,000 pounds of comb honey, an average of  $93\frac{1}{4}$  pounds per colony, all stored in twelve days from basswood.

Because of the failure of the honey sources in 1889, about 14,000 pounds of sugar syrup was fed the bees to prepare them for winter. He still has much faith in the pursuit, although the past three successive poor honey years have told heavily upon his enthusiasm.

Mr. M. is of medium height, with dark complexion, hair and eyes. A kind friend, an upright gentleman, and a thorough business man, he has attained an enviable position among the bee-keepers of Vermont, where he is so universally known. His extensive operations, his uniform success, and his practical writings, have also given him a national reputation.

## GENERAL QUESTIONS.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

### Feeding Bees for Winter.

Is glucose a good thing to feed bees for them to winter on? I have 10 or 12 colonies that will have to be fed, as the season was poor here, and I had one swarm on Aug. 24th. I want to carry them through the winter by feeding, and at as small expense as possible.

Dyersburg, Tenn. N. B. GRAVES.

ANSWER.—*Decidedly no.* Don't fool with anything but the best granulated sugar. Make the syrup as given in the books, and if you have extracted honey that you know was not taken from foul-broody hives, take Doolittle's plan, and to every two pounds of syrup add a pound of honey.

### Rocky Mountain Bee-Plant.

I send a sample of a plant that grows wild here. It comes up also in the wheat-stubble after the wheat is cut. From what I can make out from the description in the "A B C of Bee-Culture," it is the spider-plant. I find the large drop of honey which Mr. Root describes. It stays in the flower until after 9 o'clock a.m. I find the bees feeding on it considerable.

Guthrie, O. T. F. N. GARDINER.

ANSWER.—It is doubtless spider-plant or Rocky Mountain bee-plant, as both grow in that region. Both are showy, and excellent honey-plants.

### Swarming, Wild Bees, Etc.

1. I had one of my first swarms to cast a swarm yesterday. It was a small one, and I did not see what hive it came out of, but I examined them to-night and found a hive with 14 queen-cells in it; one of the cells has a queen in it, and one nice one where the queen has come out of it, and the rest of the queen-cells are torn to pieces. Part of the swarm clustered on that hive, and part on two other hives close by. The bees all went into the hives that they clustered on,

and in about two hours after that they were all lying on the ground dead in front of the hives. Why did they go into the other hives? Why did the other bees not accept them?

2. There is a very small bee around here, and it works on the sunflowers. I have never seen it on anything else, and it is not half as large as a honey-bee. It gathers pollen, and its movements are very quick, and its legs are very hairy. Can you tell me what kind of a bee it is?

3. I am a beginner. I commenced last spring with one colony, and now I have eight, all doing well and storing lots of honey. Some of them are working in the third set of sections. I have a fine honey-extractor and a solar wax-extractor that does fine work, all of which I made myself.

G. R. MCCARTNEY.

Rockford, Ills., Aug. 21, 1893.

ANSWERS.—1. Your conundrum is a hard one. It isn't an easy thing to tell why bees do many of the things that they do. There is, however, nothing so very unusual in what your bees did. For some reason the bees did not go off, possibly because something hindered the queen from going with them, and then in a demoralized way they settled on three different hives, and the two strange colonies not desiring accessions at that time ruthlessly slaughtered the intruders.

2. We are not sufficiently posted on wild bees to give you the name of the one that worked on sunflowers.

3. If you started with one colony in the spring, and have brought that up to eight, with part of them working on the third set of sections, and you have done remarkably well. Make sure that some of them are not too weak in bees or stores to winter through. The chief question is, not how many you have now, but how many colonies you will have alive next spring.

### One of the Golden-Rods.

I send a flower that blooms here during this month. Please tell what it is.

C. E. PHENICIE.

Tacoma, Wash., Sept. 15, 1893.

Prof. Cook replies to the foregoing as follows:

This plant is one of the numerous species of golden-rods. The Pacific species are distinct from ours, and the variations are so pronounced that it is necessary to have an entire plant to

identify it. It is without doubt a fine honey-plant, and surely we have very few wild flowers that are more graceful and beautiful than these gems of our marshes and uplands. A. J. Cook.

### Hives with Loose or Tight Bottoms.

I read much of wintering bees without hive bottom-boards. Now I am so unlucky as to have mine nailed fast to the hives. What would you advise me to do, in this case? Last year I owned a single colony, and wintered it O. K., with fastened bottom-board, but lost a good many bees. This year I have 3 more from the same old colony, and have taken about 60 pounds of comb honey from the first swarm.

REV. H. O. JORRIS.

Reeseville, Wis.

ANSWER.—Perhaps you can do no better than to use your hives just as they are. When you have new ones made, you can try the loose bottoms. If, however, you are anxious to try the loose bottoms this winter, you can temporarily take out the frames, take off the bottom, and make any change you like. Perhaps the chief reason for preferring loose bottoms is because you can thus have a space of about two inches under the bottom-bars in winter, and you must provide for this.

### STRAY STINGS From— The Stinger.

Away "out West," where grow big mountains,  
And "rocky" hills with cooling fountains,  
There wanders a man who pictures "scenings,"  
In a beautiful paper that is known as "*Gleanings*,"  
The fellow's quite "queer;" though not a gambler.  
He's neither a bachelor—just simply a " Rambler."

A bicycle craze is being worked up among bee-keepers; young Root, of *Gleanings*, the Stinger believes, being the father of the fad. A leading San Francisco physician, and a member of the Board of Health of that city, not long ago published a very learned and interesting article on the "Bicyclist's Hump," showing that it is a thing to be avoided. I do not want to see a race of hump-back bee-keepers in this land, so I would recommend that if a bee-keeper

has to chase his swarms on a wheel, that he keep his handle-bars well up, and thereby not double himself up like a jack-knife while propelling his machine.

Doolittle's perennial little advertising man is always "on the square," as I suppose Doolittle himself is. But the poor little fellow has been compelled to support himself so long in a perpendicular position that he must have become tired of the vertical attitude, and, as a relief to his vertebra, he has assumed a horizontal position. (See advertising page 288 of this JOURNAL.)

Perhaps, in the course of human events, this self-same little advertising man of Doolittle's will be next standing upon his head. But, then, to keep him "on the square," he must manage to get that square block under his head, instead of on top of his feet, where it will surely be, if not changed.

The distressed look that o'er spreads this little fellow that I had just been referring to, impels me to say a few more words in his behalf. From his pleading attitude I am led to believe that he is in dire distress, and would like a dose of medicine. Perhaps it might be well for some medical man to take him in hand and treat him professionally. I suggest that Dr. Miller take him to his hospital and report results as his patient improves, as he must do under the Doctor's skill.

I cannot leave this quizzical chap on the block without inquiring why he was allowed to pull those trousers he is wearing before they were longer? Possibly they were pulled too soon. In this respect they may be said to be like some of those queens of the "pulled" variety.

Editor Root of *Gleanings* says in the September issue of his paper, that the title of these "Stings" "might lead one to expect something caustic or disagreeable" in them. "On the contrary," he says, "It is very pleasant." Thank you, Bro. Root; but let the Stinger warn you to keep away from his business end, or you may have reason to find out that there is "something caustic or disagreeable" in what may follow.

Doolittle, Root and Miller have an argument under way in *Gleanings* concerning the respective merits and demerits of wooden and wire paddles for "shooting" bees on the wing. It looks

as if one side had been used to wielding baseball bats and the other tennis bats, the latter being much like the wire "paddles" used in killing obnoxious bees. "Paddle" your own canoes, boys, and may the best man win.

#### North American Convention.

We have received the following announcement from Secretary Benton:

COLUMBIAN MEETING OF THE BEE-KEEPERS OF NORTH AMERICA.

The North American Bee-Keepers' Association will hold its 24th annual convention on Oct. 11, 12 and 13, 1893, in Chicago, Ills.

#### PLACE OF MEETING.

A hall for the use of the Convention has been secured in the "Louisiana Hotel," at the corner of 71st street and Avenue B, only a few minutes walk from the south entrance to the World's Columbian Exposition. This hall is large, well-lighted, and in a quiet place.

#### HOTEL ACCOMMODATIONS.

The "Louisiana Hotel" itself will furnish comfortable accommodations to members at very moderate prices. For a small room two persons pay daily 75 cents each. Larger rooms occupied by two, at \$1.00 per person. Four persons occupying a room having two beds will pay 50 cents each. Meals can be obtained in the hotel at reasonable rates, or at numerous restaurants in the vicinity. It is best to engage rooms by letter beforehand.

The proprietors of the "Louisiana Hotel" give us the use of the hall free, expecting that all the members, so far as possible, will take rooms with them, and as the prices are moderate, and rooms are neat and convenient, it is but just for all who can well arrange to stop there to do so. For this purpose, address, Manager "Louisiana Hotel," corner 71st Street and Avenue B, Chicago, Ills., stating what priced room is wanted.

#### RAILWAY TICKETS AND BAGGAGE.

Most of the railways ticket to the Exposition Depot, near which the "Louisiana Hotel" is located, and baggage should be checked to that station, thus avoiding extra charges, as it is about seven miles from the city stations to the World's Fair Grounds. Information as to rates of travel, the time tickets are good, etc., can be obtained of all local ticket agents. From many points—especially from cities having numerous competing lines—excursions will be starting which will permit those who can take advantage of them to go and return at the usual rate for one fare, if not less than that.

FRANK BENTON,

Sec. North American B.-K.'s Association.

U. S. Dept. of Agriculture,

Washington, D. C.



CONDUCTED BY

**Mrs. Jennie Atchley,**

BEEVILLE, TEXAS.

#### Safely Landed in Beeville.

I am now (Sept. 23rd) safely landed all O. K. at Beeville, Tex., with all my wares, etc., except some 20 colonies of bees that were smashed up by letting a railroad engine run away, or right into or against one of my cars, bursting up the car and damaging my bees somewhat, which I trust the railroad company will not object to paying for.

I am well pleased so far, as this is a fine looking country, but rather dry, though water is plentiful, and the grass is still green, so we do not have to feed our cows any, which is a great saving.

This undoubtedly is a fine bee-country, as there are thousands of colonies here, and where there is timber the woods are full of bees, I am told, but there are places here that are ten miles from timber or any settlement, and I shall improve these opportunities by mating my fine queens.

JENNIE ATCHLEY.

#### Cure for Bee-Paralysis Wanted.

MRS. ATCHLEY:—During the late, hot summer, my bees all recovered from the bee-paralysis except one colony. Within the last ten days, however, I notice that the disease has again spread to half of my colonies, and I am very much afraid that I am going to have great trouble. If you have any practical experience with the disease, I shall be grateful to know if there is any cure. I have read *Gleanings* and the *AMERICAN BEE JOURNAL* for two years, and have seen nothing yet that will remedy the evil.

T. S. FORD.

Columbia, Miss., Sept. 9, 1893.

Friend Ford, after experimenting pretty thoroughly with every known remedy, I have come to the conclusion



that anything administered to the bees is a failure. As I am fully satisfied that it is caused by some atmospheric or other conditions of the weather, causing the food that the bees take to give them a fever. You may confine a bee, or bees, just as soon as she has symptoms of the disease, and she will shed all the hair from her body, thus proving that it is a fever of some kind or character, caused by the food taken, and therefore I do not think it is a catching disease.

I have always been pretty successful in curing bee-diarrhea, by giving new, clean hives and new food. I firmly believe that to take away their combs, honey, brood and all, and give them clean, fresh quarters, food, etc., will cure quicker than any remedy yet tried. I am going to name this disease "the bee-fever" until something more appropriate comes out, as it acts more after the nature of a fever than any other disease, to me. Now, as you live in the South where you can take your bees out of their sick rooms and give clean hives, food, etc., at any time of the year, I would suggest that you try my remedy and report, as you have the proper material to work on, and as you say more than half your colonies are afflicted. Should you try my plans, I will take it as a special favor if you will let me know the results. JENNIE ATCHLEY.

#### Laying-Workers or an Old Queen.

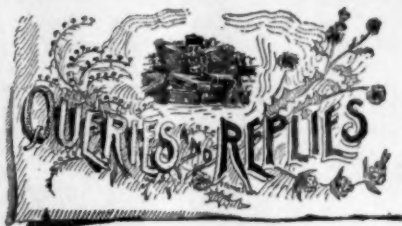
MRS. ATCHLEY:—In looking over my colonies two weeks ago, I found one with no worker brood or eggs, but a very few scattering cells of drone-brood. To-day I examined them again, and found them in the same condition. Will you please tell me what I am to infer from the condition of the colony? Are they queenless, and a laying worker conducting the affairs of the colony? or what is wrong with them?

They seem to be working well, and storing plenty of honey in the brood-nest for the winter. Could I safely introduce a queen, or not? JOHN L. MURDOCK.

Clark's Corners, Ct., Sept. 11, 1893.

Friend Murdock, your colony has either laying workers, or an old queen that is nearly played out; or if she is not old, she is no good, and if they are not pretty strong in bees, you had better introduce a young laying queen at once. But if they are strong in bees, you can let them run over until spring, then give a queen. However, I am

rather inclined to believe they are weaker than you think, and it may be better to give them a queen at once, or a frame or two of hatching brood from other hives, that they may have some young bees to go into winter with. But before you try to introduce a queen, you must be sure there is no queen there. Place in a frame of eggs and larvae, and if they start cells in three or four days, you may know they are queenless; if not, they have some kind of a queen. JENNIE ATCHLEY.



#### What Subjects Should Bee-Experiment Stations Consider?

**Query 891.**—What subjects, to your mind, are the most important to bee-keeping, and should be first taken up by an experiment station?—Mich.

Give it up.—EMERSON T. ABBOTT.

Swarming and wintering.—J. H. LARABEE.

That's the question I am asking.—R. L. TAYLOR.

The nameless bee-disease and wintering.—A. J. COOK.

Those that bear on practical bee-keeping.—G. M. DOOLITTLE.

The kind of bees. The hives and their manipulation.—DADANT & SON.

The best management for the largest yield of honey.—MRS. J. N. HEATER.

Find some plan or way to have the queens fertilized with selected drones.—E. FRANCE.

Please correspond with R. L. Taylor, of Lapeer, Mich. He is "right in it."—H. D. CUTTING.

Flowery subjects; and they should not be "taken up," but planted out.—MRS. L. HARRISON.

Lets have the troublesome wintering problem—that like Banquo's ghost, will not down!—solved for a certainty the coming winter!—WILL M. BARNUM.

1. The unhealthfulness of glucose, the adulterant and supplanter of honey. 2. The proper thickness of comb foundation in surplus honey.—P. H. ELWOOD.

1. Improvements in bee-fixtures. 2. Planting for crops and honey. 3. Best management to secure the crop. 4. Best method of crating and shipping comb honey.—C. H. DIBBERN.

Control of swarming; methods of wintering with the relations of food, temperature, etc.; and improvement in bees and honey-plants, are some of the things that promise greatest results.—JAMES A. GREEN.

1. Testing different races and strains of bees. 2. Methods of wintering. 3. Spring and summer management for comb and for extracted honey. 4. Queen-rearing. 5. Value of different honey-plants. 6. Improvement of bees.—M. MAHIN.

1. The bees. 2. The apiarist. 3. The flora. 4. The hive. As these are the four essentials that it takes to make a bee-keeper, I think they should first be considered. Then take up diseases of bees, and then the general work pertaining to the business.—MRS. JENNIE ATCHLEY.

1. The forage question, embracing the study of those subtle elements or influences operating to promote or retard the honey secretion, and what control, if any, can be had over them. 2. Improvement of the strain of bees. 3. Manipulation and management of appliances, etc.—J. P. H. BROWN.

Oh, my! there are a lot of them. The number of frames in a hive for comb and for extracted honey, is one that needs extensive experimentation, and each bee-keeper will have one or more specially interesting to himself. If all are suggested, stations can select and attack according to their judgment.—C. C. MILLER.

In the fall, that of wintering safely. In the spring, that of getting and keeping colonies in good condition. In the summer, queen-rearing, and endeavoring to work out the best plans for the same, and to have such queens purely mated. An "experiment station" should be such in fact, and yet not be run to fanciful extremes on doubtful theories.—J. E. POND.

If what I have seen so far, coming from that source, is a fair sample of what we may expect in the future from the same source, no good will come of it except the salary attached. No practical bee-keeper will ever hold a position

in such a capacity. I used to run my apiary for experimentation; it is now carried on for money. It pays well now, but it didn't then. The future hope of the bee-business is in the hands of the practical honey-producers, and we will keep it there.—G. W. DEMAREE.

Prove that chilled brood will not develop foul brood. Prove what "make" and thickness of foundation cannot be detected when eating comb honey. Prove whether sugar syrup can be profitably fed to bees to produce comb sugar-honey at current prices. Prove whether as fine section honey can be produced without separators and only a half-inch starter, as with separators and full sheets of foundation. Find what width of section is most profitable.—EUGENE SECOR.

Some of them would be these: Best race of bees. Best way to increase our pasturage by planting and saving what we already have. Best way of wintering. Best and most economical way of moving bees to better pasturage, hive, wagon and team to be considered. Best honey-packages for shipping both comb and extracted honey. Spring feeding to promote brood-rearing. Best food for wintering—shall it be honey, sugar, or a mixture? Treatment of foul brood. The above will do for a start.—S. I. FREEBORN.

#### Convention Notices.

PENNSYLVANIA.—The next meeting of the Susquehanna County Bee-Keepers' Association will be held at the Jay House, in New Milford, Pa., on Thursday, Oct. 12, 1893, at 10 o'clock a.m. All are cordially invited. Harford, Pa. H. M. SEELEY, Sec.

INTERNATIONAL.—The North American Bee-Keepers' Association will hold its 24th annual convention on Oct. 11, 12 and 13, 1893, in Chicago, Ills. Not only is every bee-keeper in America, whether a member of the society or not, invited to be present, but a special invitation is extended to friends of apiculture from every foreign land. FRANK BENTON, Sec. Washington, D. C.

MISSOURI.—The 8th semi-annual convention of the Missouri State Bee-Keepers' Association will be held at Pertle Springs (near Warrensburg) Mo., on Oct. 18, 19 and 20, 1893. It is desirable that as many as can possibly make arrangements will be present, in order that the prosperity of the Association shall not suffer in these poor seasons, for want of personal support. The Executive Committee will prepare a program that will give all an opportunity of expressing themselves on the most important subjects now occupying the attention of the bee-keepers of the country. Arrangements have been made with the M. P. Ry. Co., for 1½ fare, certificate plan. Accommodations at the Pertle Springs Hotel will be reasonable. Bee-keepers from any State and every State will be cordially welcomed. P. BALDWIN, Sec.

Independence, Mo.



### Apt-Phrenology—Some Ideas on a New Bee-Subject.

Written for the American Bee Journal  
BY DR. J. D. GEHRING.

(Continued from page 403.)

"The most conspicuous bump the drone-bee has, is what phrenologists have designated 'Alimentiveness;' or 'Appetite,' for short. This organ is located just in front of the ears—on both sides; which explains why the drone has such a wide head. The immense development of this organ gives him the appearance of having the mumps all the time, and it explains why he has such a tremendous appetite. But it doesn't explain why he will never work a lick to get something to eat. That is explained by negative demonstration, thus:

"You see me slide my thumb and forefinger back, a little behind and above the ears? Well, that's the place where 'Force' (or 'Combativeness,' as it was formerly named) is located; but, you see, the drone has a depression instead of a bump there. That means that he hasn't got any Force. It proves that he is a natural 'ninny;'—a good for nothing, lazy, loafing, profligate scallawag. Then, just above the ears is the place for 'Destructiveness,' and you see the drone has no sign of it; which still further accounts for his tameness and uselessness. Another serious deficiency in his phrenological make-up is his total lack of 'Acquisitiveness;' which is the reason why he never lays up anything for future use. And he seems to be so utterly deficient in 'Benevolence,' that he never manifests any concern for others. He will eat the last drop of honey away from his own children, and let them starve, without a pang of remorse; he has no 'Conscience,' you see.

"Another trait of character that distinguishes the drone from other bees, is his gallantry. All of our learned bee-men, I believe, are agreed that this dis-

position of the drone to attend 'social parties' during the warm and busy season, is nothing more than instinct. I don't agree with them in that, for I believe there is a phrenological reason for his amorous propensities; and that it is just the same, in kind, as in other creatures of the same gender.

"Bee-men have given considerable attention to the drone-bee for several years past. They have long since concluded that he is a nuisance, and at best a necessary evil; but how to make the honey-business a success without him, has not yet been found out. Many are studying at the problem, and I think all the successful honey-producers make more or less successful efforts to restrict drone-increase. But, I tell you, this slaughtering business, made necessary every year, is hard on the reputed amiability and gentleness of bee-men as a class."

"That's all very interesting," said Mr. Luthy, "but you haven't succeeded very well, as yet, in proving that bees have sense—phrenological sense. All you have so far proved is that drones have no sense. But I want to ask you one particular question. You have once or twice mentioned the 'ear' of the drone. Now, how can you prove that drones have ears? You are rather young in the business to face the vast army of bee-keepers who have conclusively demonstrated that bees can't hear—no more than they can see. Where is the ear of the drone 'located?' to use a favorite term of yours."

"Mr. Luthy," I answered, "did you ever examine a bee with a magnifying glass?"

"No," he said, "I never have."

"Well," I replied, that is the reason you have never discovered that bees have eyes; and for the same reason I can't prove to you that they have ears—they are not mule's ears, Mr. Luthy."

"You intimate that the question whether bees can hear or not has been conclusively settled by a vast majority of bee-keepers. My impression is that, so far, nothing has been proved against my theory by anything I have seen in print.

"I challenge the whole fraternity to answer me this question:

"Does the bee—male and female—need the organs of sight, and hearing, and scent? That little word 'need' settles the whole business for me; for, in all the Universe the Creator has left no need unsupplied.

"You know I have only three colo-

nies of bees, as yet. Well, when I have nothing else to do I sit on my camp-stool and watch those bees, just about as a young mother watches her first baby; and while I watch, I think.

"On two different occasions, as I was thus watching and thinking, it suddenly began to thunder, although there was no rain in sight. In a few minutes after the first rumbling was heard, I noticed that the bees were coming in with greater haste, and in greatly increased numbers. On those two occasions there was no rain at all. Now, I want you, if you can, to account for this manifestation of human-like intelligence, if bees can't hear? If they didn't hear the thunder, what made them rush home so furiously?

"I was going to give you the phrenology of the worker-bee, for that is really the most important and most interesting part of Api-Phrenology; but I see you are getting tired of my talk. Besides, the wind is rushing and roaring in the trees as though there was a storm near at hand. I must hurry and get home before it rains."

I awoke. The roaring and rushing I had heard in my sleep was not the wind, but my new swarm of bees. They were all out, and were just beginning to settle in a cluster on a limb of the tree above my head.

"Here is another argument for Mr. Luthy," said I to myself: "If bees can't see, and for that reason run against a person in their way, how is it that not one of the 30,000 or more of that swarm flew against me just now? I was right square in their way when they rushed out."

When I went to see why they had come out of their beautifully furnished new home, I found nearly all the comb foundation sheets melted to the bottom of the hive.

Lawrence, Kans.

### Some Bee-Keeping Experiences of Years Ago.

*Written for the American Bee Journal*

BY DR. E. GALLUP.

When I first moved into Iowa bees were scarce, and I could not get any for "seed" to start with, but an aunt had a few colonies in box-hives, and gave me one with about a pint of bees and a superannuated queen. I moved it home in February, set it in the cellar, bottom

up, on a bench, and used to set a pan of coals under every night, and stimulated a little with sugar syrup. Well, I built up quite a respectable colony by the first of July. When I received my first Italian queen from Wisconsin, I killed the old "black lady," and introduced the Italian.

Some time in April I found a colony in a tree, and as soon as I reared some queens I transferred them, killed the old black, and introduced an Italian. Three days afterward I found my Italian dead in front of the hive.

It was then six days after killing the black queen, on examining the hive I found the combs well filled with eggs, larvae and brood in all stages. I found no queen-cells, but found a drone-laying queen. The body, head, legs and wings were those of a perfect drone, but the abdomen was a perfect queen's abdomen, but extra-large. The bees were extra-large specimens from this drone-queen. I always regretted that I did not keep her to see what they would turn out, but I wanted all Italians, and killed her without thinking what I was about.

I gave the above fact at the National Convention at Cincinnati, and Mr. Langstroth stated that he once had a specimen of the same kind.

Now the above is a nut for some of the BEE JOURNAL'S wise contributors to crack.

From those 2 colonies, after the first of July, I made 7 good, strong colonies, and that was the manner in which I started in Iowa. In box-hive times, I once made 10 good colonies from one, in one season in Wisconsin; at all events, they were not movable-comb hives. With the movable-comb hives and a good, strong colony to begin with, I once made 15 colonies in one season—all good, full, strong colonies. But one must know just how, and then it is very easy fun.

Santa Ana, Calif., Sept. 8, 1893.

### Foul Brood—A Reply to a Comment on the Subject.

*Written for the American Bee Journal*

BY WM. M'EVROY.

On page 334, I see that Mrs. Jennie Atchley seems inclined to dispute everything I say or do in the whole foul-brood business. If Mrs. Atchley had charge of the foul-broody apiaries for the Province of Ontario, and in the last few years



had hundreds of very foul-broody<sup>\*</sup> apiaries to get cured of that disease, by all sorts of bee-keepers that she had to train, many of them very careless, some down-right cranks, and a few so dull and stupid that they would botch everything they undertook if they were not sharply looked after—what a terrible failure she would make of the whole business; and if she was in my place, with a whole Province to look after and manage, when she made one of the greatest failures ever known of her own apiary, when it had foul brood, and was able to save only 4 out of 100 colonies! If I had had charge of Mrs. Atchley's apiary, I positively know that I could have cured it of foul brood, and made considerable increase, and in the fall of that year would have had not less than 120 colonies in grand condition, completely cured of foul brood.

But Mrs. Atchley doubts if I am treating foul brood at all. She might just as well doubt Prof. J. J. McKenzie, of Toronto, who examined the brood, and he said that it was foul brood. I do believe that both Prof. McKenzie and myself are just as good judges of foul brood as Mrs. Atchley is.

Mrs. Atchley says she had some hives of bees washed away in a flood, and that brood rotted in them, and when the combs dried up that she gave them to bees to clean up, and all was well. That case of hers is not to the point at all, as that is different entirely from having brood reared in corrupt cells in brood-chambers full of drowned brood that had gone into great masses of corruption, followed by extreme heat in June, like Mr. Charles Urlocker, of Thorold, Ont., had in June, 1890. In less than six weeks after the flood had drowned all the brood in Mr. Urlocker's apiary, I examined his apiary and found it in a horrible state with foul brood. Mr. Urlocker first wrote to Mr. D. A. Jones, of Beeton, and he reported that it was foul brood. Then he wrote to Mr. Allen Pringle to have me sent to his aid at once, which he did.

In the Foul Brood Bulletin, Mr. D. A. Jones, of Beeton, Ont., gives one of the most convincing proofs ever given, and one that no man between earth and sky can get over or dispute. He speaks of an apiary where the brood in a lot of colonies was drowned, and how the owner took the brood out of some of the colonies at the time and they became all right; but in the others, where the drowned brood was not removed, they had foul brood. Also, see all the proofs

that I gave of the only and true cause of foul brood in the AMERICAN BEE JOURNAL of May 11, 1893.

Mrs. Atchley's saying that drowned brood won't cause foul brood is a dangerous advice to give, and will cause people to be very careless, and when foul brood starts in their apiaries it will almost ruin them before the owners wake up to the true state of things. Advice like that is like placing a board from bank to bank, high above a river, and then saying it is a safe bridge for all to travel over on, because many have crossed the river on it. Then along comes a very heavy man, and he is tempted to try it because he saw Mrs. Atchley and many others cross it; but when he gets out to the middle of the board it breaks, and down goes the man to the river of death. Then the pieces of boards are examined by several men, and one Mrs. Atchley, with faces long enough to move a meeting house, to see if it was not this "germ" and that, that caused the board to break, when it was only a case of too much man for the board that caused it to break. So it is with a hive of bees when they have too much corruption to clean out. Is it any wonder that they would sicken of so much filth, and break down under such a horrid load, and end in foul brood?

I have not one cell of dead brood of any kind in my whole apiary; I manage my apiary so as to have none, and if I had I would make wax of the combs at once.

I see that Mrs. Atchley won't take my word on my methods of curing foul brood right in the same old hives without scalding. It tickled me so when I read that, that I had to laugh right out. Why, if that dear lady had asked me how long she was to boil the hives, I would have said that would all depend on how long she intended to boil the bees. Surely, no person would do such a naughty thing as to put bees from a foul-broody colony into a boiled hive without first scalding the dirty little feet of the bees that traveled over the foul combs, so that they could not make the boiled hive as bad as ever. And to make matters a thousand times worse, the bees would be full of the deadly stores when they were put off the foul combs into the boiled hives. Why not attend to the main thing, and boil the bees? Why boil the hives and not the bees? Why should any person strain at a bat and then swallow a sawmill? Boiling hives that foul brood had been in, is a thing of the past in Ontario, and I am glad to say that I stopped all such folly as that,

and saved the bee-keepers from burning up a lot of wood in heating water, and wasting their time in boiling hives.

Mr. C. W. Post, of Murray, Ont., has more colonies of bees than any other man in Canada, and is one of the best bee-keepers in the world. He is also a good judge of foul brood. I got Mr. Post to come with me to see his neighbor, Mr. Ezra Bonter, who had an apiary of 40 colonies that had foul brood so horribly bad when I first examined it that the stench from it was almost unbearable. I got every colony cured in the same old hives without any scalding. Mr. Post and I examined every comb in every colony, and found them completely cured, and all the colonies in grand condition.

When I get a little time I will give the cause of a lot of dead brood that is found in colonies in June, and how to manage all colonies so as to never have any dead brood in any colony at any time. I will also send some letters that I got, to the AMERICAN BEE JOURNAL, and through it answer the questions in them. None of the writers of these letters need be afraid that I will ever "give away" their names.

Woodburn, Ont., Canada.

### Why Do Some Suffer from Bee-Stings and Others Not?

*Written for the American Bee Journal*

BY H. F. COLEMAN.

The above question, as asked by Emm Dee in the AMERICAN BEE JOURNAL of June 1, 1893, has not yet, in my opinion, been fully answered. The solution of this question, however, is of but little consequence to bee-keepers, but we all desire to know the truth, even if the truth is of little consequence to us. So we will go to the solution.

The degree of suffering as the result of a bee-sting is governed by the state of the nervous system of the person receiving the sting. If the nerves are at a high tension, the suffering is acute, the pain severe and continued. If the nerves are low, the suffering is less acute, the pain is not so severe, and not of as long duration.

To prove this, let a bee sting the afflicted part of a person suffering with paralysis. If the affliction is severe, the pain from the sting will not be perceived. I have had some experience along this line, that I will give.

Some years ago I overworked myself

mentally in my profession, and brought on nervous prostration. By the use of nervines, and the closest attention to hygienic rules, I have recovered so as to be able to labor again, but have at times a very low state of nerves. At other times, by the use of nux vomica, or other nervines, my nerves are normal, and I now want no better guide to the state of my nerves than the pain from bee-stings. If the pain is scarcely perceptible, which it is at times, I know that I need a few doses of some nervine, and after taking them, if I receive a sting, I can see a marked difference—the pain is more severe.

Any one can verify the truth of this position, by running his nerves down by the use of tobacco, and letting bees sting him while his nerves are so run down; and then toning them up by using nux vomica, and letting bees sting him while they are thus toned up.

Sneedville, Tenn.

[Although Mr. Coleman tells how to go about the experiment to prove his statement, we wouldn't advise any one to thus begin the use of tobacco. It is better never to know the truth than to have to resort to such means to find it out. Mr. C. simply has told how the experiment could be made, but of course he wouldn't wish a non-user of the weed to thus experiment. Don't do it, lest it might cause you to become a victim to what is, to us, the useless, filthy and disgusting habits of the tobacco slave.—Ed.]

### Bees Rearing Young, and Not Sealing Up the Cells.

*Written for the American Bee Journal*

BY R. C. FOWKE.

I notice on page 268, that Mr. Otto Bauker asks what caused his bees to rear young, and not cap all they reared. My belief is that his bees became queenless and remained so for some time, or had an inferior queen which caused them not to have any, or not a sufficient amount of newly-hatched bees to do the capping, which, in my opinion, generally do this part of the work.

As to the uncapped brood dying, I would say that it was caused by being exposed, as there was not enough bees in the hive to protect them from any change of the weather, or from moths,

etc. I will give an example of a similar thing, as I had some experience in the same line with not less than six colonies this year, some with inferior queens, and by colonies becoming queenless, etc.

About May 15th, I had 36 hives out in the hot sun, and the comb of the hives became so hot that it began to get so tender that it would get loose and fall out of the frames; and the bees had such a swarming fever that I thought I would have them moved to a cooler place. I therefore got help, and moved the hives the same Friday night. Now came the trouble: What was to be done with the bees that would return to the old apiary? I took two empty hives early Saturday morning, and put in one frame of young brood, and in the balance of the frames I put foundation, so they could go to work, as I could not give the exact bee to the hive it came from, as I could not tell them part, and if I had put them in some of the weakest colonies, they might have been destroyed or caused the colony to which they were given, to take the swarming fever, and I did not want to be bothered with any more swarms for the season. Therefore, the only thing to be done with them was to make new colonies out of them.

Now came another point—I did not have any queens to put in them, and did not have any time to send off for them, so the only thing was to see that they reared good ones themselves. This might have done for young bees, but everybody that handles bees knows that the bees that generally return to their old homes are the oldest of the colony.

On Saturday morning they began to return, and about 9 o'clock they began to settle on the only two trees that were near, so I put the hives where they were alighting. As soon as the hives were set straight, they left the trees and went pell-mell into them, as if they were going to their own homes, and not a bee disturbed another. At sunset, both hives had more bees than they could hold—we could not see the hive for the bees; and this was not all, they kept coming all day Sunday. On Monday morning I fixed two more hives, and divided them. I know there was not less than a bushel in the hives and on the sides.

In a few days they were on the right road to rear their queens, and soon had them ready to work. Three of the four I left, and from the other one I thought I would rear some Italian queens, as I just received a very fine one. So I caught the young queen before she laid

an egg, and destroyed her, and put the colony to work. As soon as they were ready for use, I took them all away except one, which was destroyed by the bees, so that left me without any for the colony, as I had used all the balance, and only had some just started a very few days. So I waited until they were ready, and gave one to them, and it was destroyed as in the former case. I kept on giving to it until I had given it five, and they were all dealt with alike. I then became disheartened, and gave them a laying queen.

They were queenless for about 65 days, and the bees were all old (more or less) at the time they were moved, and it took them between 15 or 20 days before any young bees were in the hive. It was about 50 days from the time that I made it before any of the young bees could help their brothers or sisters, and there was hardly any brood reared, and very few old bees.

The only way I see to make them do their duty, is to see that they have bees of all ages, and enough to take care of the brood. It is a fact that young bees never venture to any of the hives under a certain number of days, and only in the middle of the day; therefore, it is supposed that they do most of the house-keeping, and if they are lacking, and the old are scarce, it is a certain fact that there will be something wrong.

Let some one else try a colony the same way, and if uncapped brood won't result, I am greatly mistaken.

Baldoc, S. C., Sept. 7, 1893.

### Italian Bees—An Experiment with Drones, Etc.

Written for "The Illustrated Bee Journal"

BY ADAM GRIMM.

On pages 169 and 170, is an article about queen-bees, from the able contributor, Dr. Gallup, which I have read with much interest, the more so as I rear and send off a larger number of queens every season. I fully agree with him, that queens cannot be reared by thousands, like cabbage plants, and all be good ones; that queens are found, three of which will not lay as many eggs as one good one; that a great many beekeepers are, and will be, disappointed with the Italian bees after trying them, as many will get queens that are very little prolific, although they appear to be all right in other respects. And not only will the queens they receive be



very little prolific, but the daughters also, although beautifully marked queens, will be less prolific than queens even of the black race. Why is this so, and how is this state of things to be changed?

In the AMERICAN BEE JOURNAL, Vol. 3, No. 5, page 95, second column, in a correspondence from Bellinzona, Italy, I said:

"It struck me both last year and during the past summer, that precisely those of my colonies which had particularly bright yellow workers (and I should have added, queens) were on an average less productive in swarms and honey, than those with workers darker colored, and swarms from this yellow colony moreover issued later than those with workers darker colored, and hybrids." And I incline to coincide with Mr. Dathe, who, in the pamphlet already referred to, remarks that "very yellow queens are more delicate than those of a brown hue.

Most breeders of Italian bees know that imported queens, as well as their workers, are not as bright yellow as queens reared in this country by a number of breeders, or in Germany by Dzierzon, Kline and Dathe, and I expect most all of them have observed that those extra bright queens are more "*faible* and *tendre* and less *feconde*," and Von Berlepsch says the same on page 313, line 9, from Bellow in his second edition of his great work, "The Bee and Her Culture," in movable combs in locations without fall pasturage. He further says on that same page, counting off and answering the different points in superiority claimed for the Italian bee, under the heading, "The Italian Bee is more Prolific, Dzierzon, Bztg., 1853, page 189; Count Stosh, Bztg., 1857, page 253:"

"The noble Dzierzon race is plainly less prolific and an extra noble queen, which, with the graceful consciousness of an old French Marquis, walks over the combs, never lays as many eggs as a Mona-Caprera—names of two of the four queen-breeders and shippers in Italy—a hybrid or common one." If such a careful observer as Von Berlepsch makes such a statement in his book, I think we may believe him without much hesitation.

Dzierzon has, as we find further stated on page 311, of the same book, succeeded in breeding a race a great deal yellower, more beautiful and more constant in color than we find it in Italy. Queens reared from his queens will produce all well marked workers, even if

impregnated by a black drone, instead of producing workers half black and half Italians. Now what does this prove? To me it is plain that by a long run of breeding-in-and-in, and carefully selecting only the highest colored queens, a breeder can get a more beautiful race of Italian bees; but it further proves to me, that such a race is not as prolific and not as hardy as the Italian race is, and was originally found in Italy. It is a consequence of breeding in-and-in, of selecting breeder queens with reference to color only, without considering other qualities.

After breeding a large number of queens from three obtained of Mr. Langstroth, I succeeded in rearing workers that appeared brighter yellow than any I reared from the original queens, but at the same time I observed that my queens, at least an average of them, were not as prolific as the original queens. This was the case with extra bright ones more so than with darker ones, which occasionally appeared. Being fully satisfied that my stock was growing weaker, I concluded to see whether I could not, by the introduction of a large number of imported queens, bring them up to the old status of prolificness, and consequently introduced 43 queens of that kind into as many colonies of my home apiary. Breeding largely from them I succeeded in rearing colonies fully as vigorous and prolific as colonies with imported queens.

But while I succeeded in rearing this prolific and vigorous stock, I have observed that my bees are not as beautiful as those reared from the old stock, and that they are a little more cross. I am not now, as it was so often advised, breeding from the brightest queens only. I rear at least one or two queens from every queen I sell as long in the summer as it is practicable. I send off only queens that have proved prolific and pure; and in this way I hope to escape the evils of breeding in-and-in for the future. The fact that not one of five hundred customers I supplied with queens and colonies during the last two summers, have complained about prolificness, makes me believe that my queens were satisfactory. Mr. Gallup's three unprolific queens came, according to his statement in the AMERICAN BEE JOURNAL, from an eastern queen-breeder—if they were not, I am unaware of it. But even if breeding in-and-in is avoided, numerous and prolific queens can be reared.

Gallup gave some very good advice, "How to rear all prolific queens," in



the AMERICAN BEE JOURNAL, and I think the editor would do well to induce him to write an article for the *Illustrated Bee Journal*. By avoiding the evils of breeding in-and-in, and following the advice of Gallup, a queen-breeder cannot fail to rear prolific queens, but I doubt whether good queens can be gotten up for a dollar or two. I, for my part, cannot do so.

One thing more I will add: Queen-breeders, as well as other bee-keepers, should save all the cells that are built in colonies that voluntarily swarm. In this way they will get queens that are reared as such from the egg. It is my experience that queens of that kind are more durable and more prolific than queens reared from larvae a number of days old. If queens have to be reared under compulsion, the cells for them should be built in full colonies, and not be removed from them until the last day or two before hatching, that is, when they are six or seven days sealed over. Such queens are, with a few exceptions, rarely as good as the best.

#### CONSUMPTION OF HONEY BY DRONES AS COMPARED WITH WORKERS.

*Translated from Berlepsch's Book, page 514.*

To see how the consumption of honey by drones compared with that of worker bees, I took on Aug. 6, 1853, two small hives and put into each of them one comb, with a large amount of unsealed honey; the weight of each I carefully noticed. I then took from a straw hive that I intended to take up, 1,000 worker-bees, and put them into one of the hives; 1,000 more workers and 1,000 drones I put into the other hive, gave each of those hives a caged fertile queen and put them away into a dark cellar.

On the 18th of August, twelve days later, the comb in the hive with the workers had decreased only two ounces in weight, while the honey-comb in the hive with the workers and drones had decreased  $8\frac{1}{2}$  ounces, so that one drone had consumed  $3\frac{1}{2}$  times as much as a worker, or 320 drones consumed as much as 1,000 workers. Therefore, if a colony has to feed 2,000 drones for 84 days only, it requires 5 pounds and  $7\frac{1}{2}$  ounces to do it.

This calculation, however, is certainly too low, because drones, if not kept quiet, as in this experiment, and allowed to make repeated excursions, will surely consume a good deal more. At the same time, all the food is wasted that is used for nursing the drone-brood. There is, too, doubtless, more food required for

drone-brood than for worker-brood, which can be ascertained by weighing a comb with drone-brood just sealed over.  
Jefferson, Wis., Mar. 12, 1870.

[The foregoing article was thoughtfully sent to us by Dr. Gallup, of California, who had noticed that some of the present-day queen-breeders were advocating extra-light queens, etc. The Doctor, who was well acquainted with Mr. Grimm, says that "In his day he was an extra-good authority." Although the article was written over 20 years ago, it will, no doubt, be read with interest to-day.—Ed.]



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

#### A Correction, and the Past Season.

I notice on page 344 it says that I had a colony of bees that stored only  $35\frac{1}{2}$  pounds of honey in four years. What I meant to say was, they never swarmed, and I got 352 pounds of honey, instead of  $35\frac{1}{2}$  pounds.

The honey harvest ended here on Sept. 12th. We had only two honey-flows this year—basswood and golden-rod. Blackheart was no good, as it was too dry. A colony of bees on the scales gained 73 pounds on basswood bloom, and on golden-rod 43 pounds.  
G. W. NANCE.

Anthon, Iowa, Sept. 18, 1893.

#### Bee-Hunting—How It is Done.

About the time new swarms commence watering their young, go to a stream and follow it until you find a sand-bar. Sit down and keep a good lookout for a bee. When she gets filled, she will take a bee-line for a tree, or log on the ground. Mark the line about as far as you think they are from the tree. Now see if the bees are watering at some other point on either side of the main line; if they are, get another line, and mark it through until you intersect the first line, and where they cross,

there you will find the tree, log or stump that has the bees.

These cross lines you can get much better in the fall after the frost has killed the bloom. Take an old comb, go to an open place in the woods, make a small fire, place some comb on it, which will send up fumes in the air, and a bee crossing that way will come down to the ground and come to the honey that you may have on a stump close by. The honey may be half water poured on a comb.

You will have to wait some time before the bees get to going straight, if they are half a mile away, but if close by, they will swing around but very little before you get the line, then mark the line with a hatchet, or break some limbs off, or having some paper in your pocket, put some sticks in the ground and stick the paper on. After doing this, change the bait on either side of the line. The bees will soon find it, and then you will soon have another cross line.

Sometimes you can follow the bees to a tree by the roar they make working on the bait. Sometimes they will have the whole colony there, except the queen and young ones, but where they are so ravenously hungry, they are no good for honey; for when you cut the tree you find only what honey you fed them from the stump, and that will be a little "thin."

Keniney, Ills.

GEO. POINDEXTER.

#### Results of the Season, Etc.

We do not profess to be experts in bee-keeping, but we keep about 75 to 100 colonies of bees, and produce some very fine comb honey, but we do not run our bees for extracted honey. We have a river trade which takes between two and three thousand pounds of section honey per season. We have shipped one wagon-load of comb honey north. We will have something less than 3,000 pounds of white honey this season.

Last winter cleaned out more than  $\frac{1}{2}$  of the bee-keepers near here, and a good many of them have quit for good. We had a pretty fair season for honey this year, and all of our farm crops are good. Corn would have been better with more rain, but it is pretty good as it is. We put in 15 acres of Alsike clover, which will give our bees something to work on next spring and summer. We find Alsike yields more honey than red or white clover.

Our bees are bringing in some honey from the islands. They have only to cross the Mississippi river channel for their fall stores.

G. G. BROWN.

Bellevue, Iowa, Sept. 20, 1893.

#### Winter Feeding of Bees, Etc.

As the time of year is at hand to feed up for winter, I will give my method, which I prefer to any other I ever tried: Take off the supers or honey-boxes, and make a honey-board out of one-half or three-fourths inch lumber, with a bee-space on the under side of the board; a 2-inch hole in the cen-

ter, and one in each corner, if you wish to feed rapidly. Take quart fruit-cans—half gallons if your upper story will go on over them; fill them with sugar syrup, tie a piece of cheese-cloth over them, and turn them bottom side up over the holes. The syrup will run through only as fast as the bees keep it clean on the under side. If you use glass cans you can see how fast they take it in.

To make a syrup, take 5 parts of sugar and 2 of water, bring it to a boil, skim it, and then it is ready for use. Each colony should have 20 to 25 pounds on which to start in the winter.

In our section of country (Parke county) we have had only a very moderate yield of honey this season. It being wet in the forepart of the season fruit-bloom was very limited; then the prospects were very favorable for a good crop. Dry weather set in sooner than usual, and cut supplies short. There is very little fall honey. I got 30 pounds of comb honey each from the best colonies; I had 24 old colonies and 12 swarms.

HENRY DURHAM.

Sylvania, Ind., Sept. 6, 1893.

#### How Not to Introduce Queens.

In the first place, get your queens. Don't do as a friend of mine did recently. He wrote to a queen-breeder, beyond the Lakes, ordering a lot of queens with which to supersede those now presiding over his colonies of the most pestiferous bees he ever handled. So bad are they that the whole neighborhood are up in arms against him, and the poor man is at his wits' end. He resolved to change the breed, and accordingly sent for a dozen Italian queens.

Without waiting the arrival of the new queens, our hasty friend killed the present incumbents so as to be ready to introduce the new ones immediately upon their arrival. But, alas! the new queens have not yet come, and four long weeks have elapsed since they were to have been sent, which means four weeks of dwindling. It is very obvious to remark—Get your new queens first, before you kill the old ones, else you will be troubled with dwindling and laying workers.

We are somewhat surprised that a bee-keeper of ten years' experience would make such a blunder, and yet the confiding clergyman thought all bee-keepers were men of probity, especially queen-breeders, and, nothing doubting, proceeded to exterminate the mothers of such cross bees with which there was no living in peace. But doubtless the queen-rearer, when he gets time, will explain why the queens were not sent.

J. W. VANCE.

Madison, Wis., Aug. 25, 1893.

**A Binder** for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for \$1.40.

**CONVENTION DIRECTORY.***Time and place of meeting.*

1893.  
Oct. 11, 12, 13.—North American (International), at Chicago, Ills.  
Frank Benton, Sec., Washington, D. C.  
Oct. 12.—Susquehanna Co., at New Milford, Pa.  
H. M. Seeley, Sec., Harford, Pa.  
Oct. 18-20.—Missouri, at Pertle Springs, Mo.  
P. Baldwin, Sec., Independence, Mo.  
Dec. 12, 13.—Illinois State, at Springfield, Ills.  
Jas. A. Stone, Sec., Bradfordton, Ills.

**NOTE** In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

**North American Bee-Keepers' Association**

PRESIDENT—Dr. C. C. Miller....Marengo, Ills.  
VICE-PRES.—J. E. Crane.....Middlebury, Vt.  
SECRETARY—Frank Benton, Washington, D. C.  
TREASURER—George W. York....Chicago, Ills.

**National Bee-Keepers' Union.**

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.  
GEN'L. MANAGER—T. G. Newman, Chicago, Ill.  
147 South Western Avenue.

**"A Modern Bee-Farm and Its Economic Management,"** is the title of a splendid book on practical bee-culture, by Mr. S. Simmins, of England. It is 5½x8½ inches in size, and contains 270 pages, nicely illustrated, and bound in cloth. It shows "how bees may be cultivated as a means of livelihood; as a health-giving pursuit; and as a source of recreation to the busy man." It also illustrates how profits may be "made certain by growing crops yielding the most honey, having also other uses; and by judgment in breeding a good working strain of bees." Price, post-paid, from this office, \$1.00; or clubbed with the BEE JOURNAL for one year, for \$1.70.

**Full of the Freshest Thoughts.**

—Here is what the *Wisconsin Farmer* says of this paper: "The AMERICAN BEE JOURNAL is the senior bee-journal in the United States. It has been from the start ably conducted, and continues in the lead of bee-journalism. Every bee-keeper of progressive tendencies should be a subscriber. It is a weekly magazine, and is always full of the freshest thoughts on bee-matters."

**Read our great offers on page 421.**

**The Columbian Meeting** of the North American Bee-Keepers' Association will convene at the "Louisiana Hotel," Cor. 71st St. and Avenue B, Chicago, Ills., at 1:30 p.m., Oct. 11th. All who arrive before the call to order, are requested to hand their names with Dues to the Secretary, who will be at the Hotel on Oct. 10th, and during the morning of Oct. 11th. This plan will facilitate the business of the Convention.

**TOPICS FOR DISCUSSION.**

The following are some of the subjects that will be discussed at the convention:

- President's Address.
- What Experience Has Taught Us the Past Few Years.
- Fixed Spacing and Prevention of Brace and Burr Combs.
- Queen-Rearing as an Occupation for Ladies.
- Queen-Rearing.
- Sending Queens Long Distances.
- The Production of Comb Honey.
- The Winter Losses—Their Remedy.
- The National Bee-Keepers' Union—Its Scope and Legitimate Work.
- The Control or Prevention of Swarming.
- Should there be Any Change in the Rules for Grading Honey Adopted at the Last Convention?
- How Can the Usefulness of the North American Bee-Keepers' Association be Increased?
- Apiculture at Our Experiment Stations.

**WHO WILL BE THERE?**

In addition to those mentioned last week, and also on page 423 of this number of the BEE JOURNAL, the following are expected to be present:

- Mrs. Jennie Atchley and W. R. Graham, delegates from the North Texas Bee-Keepers' Association.
- Mrs. A. A. Simpson, of Pennsylvania.
- Mrs. J. M. Null, of Missouri.
- Hon. C. Grimm, of Wisconsin.
- Henry E. Bliss, and Mrs. Bliss, of New York.
- J. A. Foster and B. Shanks, of Ontario, Canada.
- Jno. H. Stuart, of West Virginia.

Also some hundreds of others. They will swarm from the East and West, the North and South; from beyond the Great Lakes, from the Atlantic coasts, from where the great mountains slope to the peaceful Pacific, from the broad prairies, and from the Sunny Southland, they will gather round the Queen of Cities—CHICAGO THE PEERLESS.

**STILL MORE TO FOLLOW.**

There'll still be something after the Bee-Keepers' Week. The American Poultry Association will meet in Chicago the week after the North American Bee-Keepers' Association, and at the same time the grand exhibition of poultry will take place. The Secretary, Mr. Geo. E. Peer, of Rochester, N. Y., has extended a cordial invitation to members of the North American to be present.

FRANK BENTON, Sec.



## Honey & Beeswax Market Quotations.

### Rules for Grading.

The following rules for grading honey were adopted by the North American Bee-Keepers' Association, at its last meeting, and, so far as possible, quotations are made according to these rules:

**FANCY.**—All sections to be well filled; combs straight, of even thickness, and firmly attached to all four sides; both wood and comb unsoiled by travel-stain, or otherwise; all the cells sealed except the row of cells next the wood.

No. 1.—All sections well filled, but combs uneven or crooked, detached at the bottom, or with but few cells unsealed; both wood and comb unsoiled by travel-stain or otherwise.

In addition to this the honey is to be classified according to color, using the terms white, amber and dark. That is, there will be "fancy white," "No. 1 dark," etc.

**CHICAGO, ILL.**—Comb honey is coming in plentifully—most of it fancy and No. 1 white. White extracted scarce with plenty of inquiry for same. We quote: Fancy white, 16c.; No. 1 white 15c.; fancy amber, 14c.; No. 1 amber, 14c. Extracted, 5@7c. Beeswax slow at 20c. Sept. 14, J. A. L.

**CHICAGO, ILL., Sept. 15.**—The receipts of comb honey have not been in excess of the demand up to this date. We have yet very little surplus. Prices remain at 15@16c. for the very best grades. Discolored combs and the darker grades generally are slow of sale at about 14c. Our sales, however, are chiefly at 15c. We consider this about the best season of the year for shipping and selling comb honey. It stands transportation better than it will when the cold weather comes, and people buy it in larger quantities than they do later in the fall. Extracted is nominal, some sales being made all the time at prices ranging from 6@7c., with some other dark goods a little lower. Beeswax salable at 22c. We would advise those having honey ready to ship, to send it forward during this month, or early next. R. A. B. & Co.

**ST. PAUL & MINNEAPOLIS, MINN., Sept. 12.**—The receipts of honey are quite liberal, especially the last two weeks. A great deal of Wisconsin comb honey has arrived and is in very good condition; this is being sold at 13½@16c.; the lower price being for darker honey, which, however, does not meet with an active inquiry. California 1-lb. sections selling at 14@16c. Two or three carloads of extracted honey have recently arrived, and sold at 6½@7c., there being little or no difference between white and amber as to price obtained in this market. The best season for comb honey is now coming on. S. & A.

**CINCINNATI, O., Sept. 18.**—Demand is slow for extracted honey with plentiful arrivals. It brings 5@8c. Choice comb honey is in good demand at 15@16c. for best white. Arrivals are good.

Beeswax is in slow demand with large arrivals at 20@23c. a pound for good to choice yellow C. F. M. & S.

**BOSTON, MASS.**—Fancy white, 16@18c.; No. 1 white, 15@16c. Extracted, white, 7@8c.; amber, 6½@7c. Beeswax, 25@28c. B. & R.

**KANSAS CITY, Mo.**—We quote: No. 1 white, 16@17c.; No. 1 amber, 14@15c.; fancy dark, 12@13c.; No. 1 dark, 10@12c. Extracted, 6½@7c.; amber, 5½@6c.; dark, 5c. Beeswax, 17@18c. C-M. C. Co.

**KANSAS CITY, Mo., Sept. 14.**—Demand is good. Supply light. We quote: 1-lb. comb, 16c.; light weight, 14c. Extracted, white, 7½c.; amber, 6½c.; dark, 5@5½c. Beeswax, 22@25c. H. & B.

**NEW YORK, N. Y., Sept. 12.**—Our market remains quiet. New comb honey is arriving freely, and the demand is rather light. We quote: Fancy white, 1-lb. sections, 14@15c. Off grades irregular and in no demand. Extracted is selling slow at from 60@65c. per gallon for Southern, and 5½@6c. per pound for Californian. Beeswax dull at 23@24c. H. B. & S.

**ALBANY, N. Y., Sept. 28.**—The market for comb honey is firmer, and demand good. Extracted honey is slow. Present indications are that there will be too much extracted honey this season. We quote: White comb, 15@16c.; mixed, 13@15c.; dark, 11@12c. H. R. W.

**CHICAGO, ILL.**—We quote: Fancy selling at 16c.; choice, 15c.; No. 2, 13@14c.; poor, 12c. With prospects of a large crop, we advise early shipments to the market. Extracted selling at from 5½@7c., depending upon the color, flavor and style of package, and quantity the buyer will take. Beeswax, 22@24c. We have no stock on hand. S. T. F. & Co.

## List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

### Chicago, Ills.

J. A. LAMON, 44 and 46 So. Water St.  
R. A. BURNETT & Co., 161 South Water Street.

### New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.  
HILDRETH BROS. & SEGELKEN,  
28 & 30 West Broadway.  
CHAS. ISRAEL & BROS., 110 Hudson St.

### San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

### Minneapolis, Minn.

J. A. SHEA & Co., 14 & 16 Hennepin Avenue.

### Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.  
CLEMOMS-MASON COM. CO., 521 Walnut St.

### Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

### Hamilton, Ills.

CHAS. DADANT & SON.

### Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs

## Wanted—Comb Honey.

Highest Cash Price paid for same. Address,  
I. J. STUBBINGHAM,  
12A3t 105 Park Place, New York City.